

HP workstation accessories brochure
Options and high-performance displays for
your HP workstations
Summer 2008



Add these accessories to your HP workstation for a more robust and productive computing experience. HP workstation accessories provide:

- Improved performance
- Expanded functionality
- Expected reliability
- Innovative technology
- Award-winning customer service
- Great features at an affordable price

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Recommended options for your HP workstations



HP recommends Windows Vista® Business.

What type of power user are you? HP makes it easy by recommending what options work best for your needs.

User type	Typical models	Recommended options
Power professional	xw4550	Performance: <ul style="list-style-type: none"> • HP Memory—Minimum 2 GB is recommended to meet future applications and OS upgrade needs. Advanced viewing: <ul style="list-style-type: none"> • HP Performance series display—Minimum LP2065, recommended LP2275w or LP2475w • 3D graphics cards—Maximum performance for 3D applications Storage and input: <ul style="list-style-type: none"> • Additional hard drives—To increase speed, storage capacity and for data backup
Engineering design	xw4550 xw4600 xw6600 xw8600 xw9400	Advanced input: <ul style="list-style-type: none"> • HP SpacePilot USB 3D Intelligent Controller—30 percent increase in productivity and up to a 50 percent reduction in repetitive mouse movements. Manipulate the 3D model, while using the mouse to select, create, edit and annotate. Performance: <ul style="list-style-type: none"> • HP Memory—Minimum 3 GB for 32-bit OS or 8 GB¹¹ for 64-bit OS • Second hard drive—Upgrade to meet storage and backup capacity for RAID. • Second processor—For up to four cores of processing power for rendering (excluding 4400, 4550, 4600 and mobile workstations) Advanced viewing: <ul style="list-style-type: none"> • HP Performance series monitors—Recommend 30-inch diagonal. Suggest multiple monitor setup for improved productivity. (Dual-link DVI required for 30-inch diagonal LCD.) • 3D graphics cards—Maximum performance for 3D applications by using the graphics card for optimized video acceleration instead of the CPU. Support larger and multiple displays. Graphics card upgrade required for 30-inch diagonal displays.
Digital media and entertainment	xw4550 xw4600 xw6600 xw8600 xw9400	Advanced input: <ul style="list-style-type: none"> • HP SpacePilot USB 3D Intelligent Controller Performance: <ul style="list-style-type: none"> • HP Memory—4 GB¹² is recommended for 32-bit OS or 8 GB¹¹ for 64-bit OS. • Second processor—For up to four cores of processing power for rendering (excluding 4400, 4550, 4600 and mobile workstations) • Multiple hard drives and RAID configuration—Additional drives are ideal for video editing work. HP offers up to 1 TB¹³ of storage, which is especially critical for videographers. • Sound Blaster X-Fi Audio Card (excluding mobile workstations) and speakers Advanced viewing: <ul style="list-style-type: none"> • 3D graphics cards—Maximum performance for 3D applications and multiple displays. • HP DreamColor LP2480zx Professional LCD display—delivers billion-color accuracy with the world's only color-critical 24-inch diagonal widescreen LCD display based on the HP DreamColor technology—a must for high definition animating.
Oil and gas	xw8600 xw9400 xw4600 xw6400	Performance and viewing: <ul style="list-style-type: none"> • HP Memory—Minimum 32 and 64 GB recommended. • High-end graphics cards—Upgrade to latest NVIDIA graphics needed for application requirements and to support larger and/or multiple displays. Graphics card upgrade is required for 30-inch diagonal displays. • Up to two quad-core Xeon processors¹⁴—Provide engineers with quicker time to insight, understanding and freedom to pursue more design alternatives by providing them more performance and throughput in their personal computing resource. • HP Performance series monitors—Recommend LP3065. This market requires the largest screens and highest resolution possible. The 30-inch diagonal includes a wider color gamut improving color reproduction. (Dual-link DVI required for 30-inch diagonal LCD.) Storage and input: <ul style="list-style-type: none"> • HP SpacePilot USB 3D Intelligent Controller • Additional hard drives—To increase speed, storage capacity and for backup via RAID
Financial services	xw6600 xw4600 xw9400	Enhanced display performance: <ul style="list-style-type: none"> • Four displays—For a typical financial trader configuration • HP LP2275w Flat Panel Display—A popular monitor for this segment due to thin bezels for better tiling

Memory



As the files and documents we work with grow in size and become more robust, so do the demands of the computers and applications we use them on. Additional memory is recommended when working with large files and robust applications to maintain the performance and reliability you demand from your workstation.

Did you know?

The HP xw8600 workstation has up to 16 DIMM slots and is expandable up to 128 GB of memory! Check out the expandability on all HP workstations by visiting: www.hp.com/workstations.

Why buy memory?

Adding additional memory allows for:

- Increased system performance
- Faster start-up and fewer delays during routine operations

- Easy toggling between several open applications
- Reduced system downtime, data loss and financial impact of memory failure
- Ability to handle increasingly demanding applications without degrading performance

Why buy HP memory?

- Non-HP memory may perform less effectively or may even fail when exposed to the demands of a high-end workstation motherboard.
- HP memory is thoroughly tested on HP products to provide high reliability and to decrease the risk of downtime and enable more efficient performance.
- HP assumes the remaining warranty term of the workstation's standard three-year limited warranty.



Description	Part number	Smart Buy P/N	HP Workstation xw4550	HP Workstation xw4600	HP Workstation xw6600	HP Workstation xw8600	HP Workstation xw9400
HP 512MB (1x512MB) DDR2-667 ECC RAM	PV940AA	PV940UT	•	•			
HP 512MB (1x512MB) DDR2-667 ECC Reg RAM	EV281AA						•
HP 512MB PC2-5300 (DDR2-667) Memory DIMM	PX975AA		•				
HP 1GB (1x1GB) DDR2-667 ECC Reg RAM	EV282AA	EV282UT					•
HP 1GB (1x1GB) DDR2-667 ECC RAM	PV941A	PV941UT	•	•			
HP 2GB (1x2GB) DDR2-667 ECC Reg RAM	EV283AA	EV283UT					•
HP 4GB (1x4GB) DDR2-667 ECC Reg RAM	GY414AA						•
HP 512MB (1x512MB) DDR2-667 ECC FBD RAM	EM159AA	EM159UT			•	•	
HP 1GB (1x1GB) DDR2-667 ECC FBD RAM	EM160AA	EM160UT			•	•	
HP 2GB (1x2GB) DDR2-667 ECC FBD RAM	EM161AA	EM161UT			•	•	
HP 4GB (1x4GB) DDR2-667 ECC FBD RAM	EM162AA	EM162UT			•	•	
HP 8GB (1x8GB) DDR2-667 ECC FBD RAM	GM112AA					•	
HP 512MB (1x512MB) DDR2-800 ECC RAM	GH738AA	GH738UT		•			
HP 1GB (1x1GB) DDR2-800 ECC RAM	GH739AA	GH739UT		•			
HP 2GB (1x2GB) DDR2-800 ECC RAM	GH740AA	GH740UT		•			
HP 1GB (1x1GB) DDR2-800 ECC FBD RAM	KY112AA	KY112UT				•	
HP 2GB (1x2GB) DDR2-800 ECC FBD RAM	KY113AA	KY113UT				•	
HP 8GB (1x8GB) DDR2-533 ECC Reg RAM	GT808AA						•

Second processors



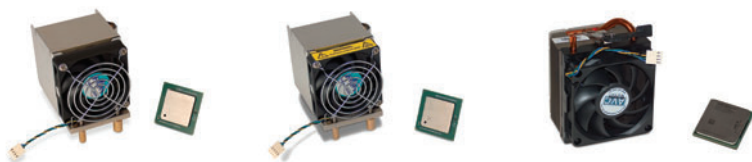
Multi-tasking is now a necessity in our daily computing needs and as the applications become more commanding, our need for processing power increases. Adding a second processor to your workstation is essential because it improves your efficiency and the productivity of your applications.

Why buy a second processor?

- Second processors are an ideal solution for customers working with large designs, complex analysis, scientific modeling or just simply running a number of applications at once.
- HP offers dual-core, dual processing solutions from both AMD and Intel®, giving you up to four cores of processing power.

Why buy HP second processors?

- Afforded compatibility. HP second processors have the same chipset, hardware and drivers as the primary processors, helping to enable efficient performance.
- Software vendor (SV) certification. HP processors are certified by independent software vendors (ISVs) to provide that ISV applications perform reliably.
- HP processors support 64-bit operations, which means your computing needs will be met today and tomorrow. HP 64-bit processors also accommodate current 32-bit applications.¹



Description	Part number	Smart Buy P/N	HP Workstation xw4550	HP Workstation xw4600	HP Workstation xw6600	HP Workstation xw8600	HP Workstation xw9400
Intel Xeon E5205 1.86 6MB/1066 DC CPU-2	GX566AA				•	•	
Intel Xeon E5240 3.00 6MB/1333 DC CPU-2	KY198AA				•	•	
Intel Xeon E5405 2.00 12MB/1333 QC CPU-2	GX569AA	GX569UT			•	•	
Intel Xeon E5410 2.33 12MB/1333 QC CPU-2	GX570AA	GX570UT			•	•	
Intel Xeon E5420 2.50 12MB/1333 QC CPU-2	GX571AA	GX571UT			•	•	
Intel Xeon E5430 2.66 12MB/1333 QC CPU-2	GX572AA				•	•	
Intel Xeon E5440 2.83 12MB/1333 QC CPU-2	GX573AA	GX573UT			•	•	
Intel Xeon E5450 3.00 12MB/1333 QC CPU-2	GX574AA	GX574UT			•		
Intel Xeon X5260 3.33 6MB/1333 DC CPU-2	GX568AA				•	•	
Intel Xeon X5272 3.4 6MB/1600 DC CPU-2	KY116AA				•		
Intel Xeon X5450 3.00 12MB/1333 QC CPU-2	KD215AA				•		
Intel Xeon X5460 3.16 12MB/1333 QC CPU-2	GX575AA				•		
Intel Xeon X5472 3.0 12MB/1600 QC CPU-2	KY115AA				•		
Intel Xeon X5482 3.2 12MB/1600 QC CPU-2	KY114AA				•		
AMD Opteron 2210 1.8 1MB/1000 2nd CPU	RC403AA	RC403UT					•
AMD Opteron 2212 2.0 1MB/1000 2nd CPU	EW295AA						•
AMD Opteron 2214 2.2 1MB/1000 2nd CPU	EW296AA						•
AMD Opteron 2216 2.4 1MB/1000 2nd CPU	EW297AA	EW297UT					•
AMD Opteron 2218 2.6 1MB/1000 2nd CPU	EW298AA						•
AMD Opteron 2220 2.8 1MB/1000 2nd CPU	RM696AA						•
AMD Opteron 2222 3.0 1MB/1000 2nd CPU	RM697AA						•
AMD Opteron 2352 2.1 2MB/1000 2nd CPU	GX306AA						•
AMD Opteron 2354 2.2 2MB/1000 2nd CPU	GX307AA						•
AMD Opteron 2356 2.3 2MB/1000 2nd CPU	GX308AA						•

Storage, hard drives and optical drives



The need for storage capacity increases as our applications become more robust and data files grow in size. Adding more or higher capacity hard drives will solve most capacity needs. Higher RPM drives typically deliver better performance plus, upgrading to a Redundant Array of Independent Disks (RAID) configuration with one HP storage controller can take performance even higher and can also enhance reliability through data redundancy. Optical burning devices allow you to store and back up your data in a cost-effective manner.

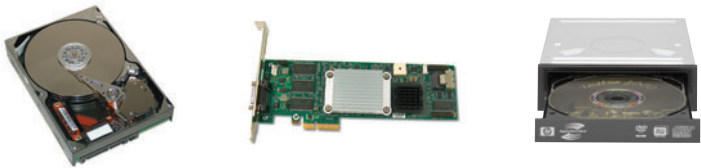
Why buy HP hard drives?

HP drive qualification tests rigorously check for data reliability, performance and adequate ElectroMagnetic Interference (EMI) margins. Not all drives make the grade and those that do may receive HP customizations in order to meet HP's intense workstation standards. HP drives also offer the latest reliability and performance technologies like SMART and NCQ.

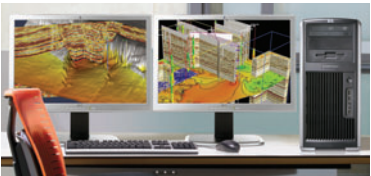
- Self Monitoring Analysis and Reporting Technology (SMART) allows the hard drive to monitor its performance and raise flags if imminent failures are predicted.
- NCQ (Native Command Queuing) allows the hard drive to optimize the order of multiple outstanding write or read commands improving overall throughput.

Why buy HP optical drives?

- Extensive performance and media compatibility testing
- Qualified to work with HP workstations
- DVD writers include Roxio Easy Media Creator for fast and easy burning
- One-year limited warranty or the remaining warranty term of the HP product in which it is installed (not to exceed three years)
- Reusable media thanks to RW capabilities
- Front bezel color matches your HP workstation for a consistent look.

			HP Workstation xw4550	HP Workstation xw4600	HP Workstation xw6600	HP Workstation xw8600	HP Workstation xw9400
Description	Part number	Smart Buy P/N					
HP 160GB SATA 3Gb/s NCQ 7200 HDD	PV944A	PV944UT	•	•	•	•	•
HP 250GB SATA 3Gb/s NCQ 7200 HDD	EA788AA	EA788UT	•	•	•	•	•
HP 500GB SATA 3Gb/s NCQ 7200 HDD	PV943A	PV943UT	•	•	•	•	•
HP 750GB SATA 3Gb/s NCQ 7200 HDD	RH201AA	RH201UT		•	•	•	•
HP 1TB SATA 3Gb/s NCQ 7200 HDD	GE262AA			•	•	•	•
80GB SATA 3.0Gb/s Hard Drive	PY276AA		•	•	•	•	•
HP 80GB WD Raptor SATA NCQ 10K HDD	EM172AA	EM172UT		•	•	•	•
HP 160GB WD Raptor SATA NCQ 10K HDD	EW222AA	EW222UT		•	•	•	•
HP 3.5-inch Removable SATA HDD Carrier	RY103AA			•		•	•
HP 3.5-inch Removable SATA HDD Frame/Carrier	RY102AA			•		•	•
HP 73GB SFF 2.5-inch SAS 3Gb/s 10K HDD	GE259AA				•	•	•
HP 146GB SFF 2.5-inch SAS 3Gb/s 10K HDD	GE261AA				•	•	•
HP 73GB SAS 3Gb/s 15K HDD	EA329AA	EA329UT		•	•	•	•
HP 146GB SAS 3Gb/s 15K HDD	EA330AA	EA330UT		•	•	•	•
HP 300GB SAS 3Gb/s 15K HDD	EM174AA	EM174UT			•	•	•
LSI 3041E 4-Port SAS 3Gb RAID Card	EH417AA		•	•	•	•	•
LSI 8344ELP 8-port SAS HW RAID Card	EX830AA						•
LSI 8888ELP 8-port SAS HW RAID Card	GE258AA			•	•	•	•
HP 16X DVD+RW SuperMulti LS SATA Drive	EW269AA	EW269UT	•	•	•	•	•
HP 16X/48X DVD-ROM SATA Drive	EW268AA			•	•		

Graphics



Why buy professional graphics?

The multiple monitors and fast graphical processing options that are available today demand high-end graphics cards to fine-tune the functionality improvements of the applications we use. Adding professional graphics allows you to increase productivity with multiple display support and increase performance in 2D or 3D applications with more memory and processing power on the graphics card.

Professional graphics are ideal for those workstation users who need professional 2D or advanced 3D graphics performance and greater productivity through multi-tasking across several monitors.

Why buy HP graphics?

HP workstation graphics cards are certified by major independent software vendors and can offer excellent solutions for your graphics needs.

- Dedicated workstation support, by both HP and graphics vendors
- Long lifecycles enable enterprises to develop stable images and support consistent deployments over longer periods, thus lowering total cost of ownership.
- Certified by software providers to run with their applications
 - Added stability, reliability and support
 - Specific application productivity tools and drivers to accelerate performance
- HP-tested unified graphics driver
 - Enables compatibility between workstation, graphics, OS and applications
 - Bugs caught before they show up in user environments with thorough test suite
 - Tested both on Windows and Linux



Description	Part number	Smart Buy P/N	HP Workstation xw4550	HP Workstation xw4600	HP Workstation xw6600	HP Workstation xw6600	HP Workstation xw9400
NVIDIA Quadro NVS 290 256MB PCIe Graphics	GN502AA	GN502UT	•	•	•	•	
NVIDIA Quadro NVS 440 256MB PCIe Graphics	PT453A	PT453UT		•	•	•	•
NVIDIA Quadro FX370 256MB PCIe Graphics	GP528AA	GP528UT	•	•	•	•	•
NVIDIA Quadro FX570 256MB PCIe Graphics	GR521AA	GR521UT	•	•	•	•	•
NVIDIA Quadro FX1700 512MB PCIe Graphics	GP529AA	GP529UT	•	•	•	•	•
ATI FireGL V5600 512MB PCIe Graphics	GT346AA	GT346UT	•	•	•	•	
NVIDIA Quadro FX3700 512MB PCIe Graphics	KD506AA	KD506UT		•	•	•	
NVIDIA Quadro FX4600 768MB PCIe Graphics	RV706AA	RV706UT		•	•	•	•
NVIDIA Quadro FX5600 1.5GB PCIe Graphics	GU095AA	GU095UT				•	•
DMS-59 to Dual DVI Cable for NVS and T2	DL139A			•	•		
HP DMS-59 to Dual VGA Cable Kit	GS567AA			•	•	•	
NVIDIA HD component breakout cable	GU096AA		•	•	•	•	
NVIDIA SLI Graphics Connector	PP654A						•

Graphics: ATI FireGL™ from AMD

Next-generation graphics

Introducing the ATI FireGL™ V5600 workstation graphics accelerator from AMD. This mid-range workstation solution with 512 MB frame buffer memory is designed to boost 3D application performance and user productivity. Based on a new generation graphics processor unit (GPU) with 120 unified shader units, the ATI FireGL V5600 ultra parallel processing architecture improves throughput by automatically directing graphics horsepower where it's needed.



All ATI FireGL accelerators feature two Dual Link enabled Digital Visual Interface (DVI) outputs, capable of generating a multi-monitor desktop of over 5,000 pixels wide. Featuring native multi-accelerator support, users can see more and do more with four displays being driven by two ATI FireGL accelerators in the same workstation.

ATI FireGL workstation graphics accelerators are thoroughly tested and certified with major Computer Aided Design (CAD) and Digital Content Creation (DCC) applications, offering a level of reliability not found in consumer graphics products.

ATI FireGL accelerators have been engineered to deliver innovation and reliability for a wide range of professional operating environments, including Windows XP, Windows Vista and Linux. The unified driver, which supports all ATI FireGL workstation products, helps reduce the total cost of ownership by simplifying installation, deployment, and maintenance.



In addition, ATI FireGL products incorporate unique AutoDetect technology from AMD. As users open new 3D applications, or move between them, customized ATI FireGL graphics driver settings are automatically configured for improved performance no matter what the workflow demands.

To further leverage your graphics investment, stream computing applications can take advantage of the massive parallel processing capability of the GPU for compute-intensive tasks such as physics, structural analysis and fluid dynamics.

Features

- Powered by next-generation ATI FireGL GPU from AMD
- Scalable ultra parallel processing architecture with 120 unified shaders
- High performance stream computing
- AutoDetect technology
- Full Shader Model 4.0, DirectX® 10 and OpenGL® 2.1 advanced features support
- Customized and certified for CAD and DCC applications

Display capabilities

- Two Dual Link DVI outputs
- Multi-accelerator configuration support
- Independent multi-monitor resolution and refresh rate
- Full 10-bit display pipeline
- Up to 16-bit per RGB color component High Dynamic Range output

Availability

ATI FireGL™ V5600 workstation graphics accelerator is available in HP Workstations xw4550, xw4600, xw6600, and xw8600.

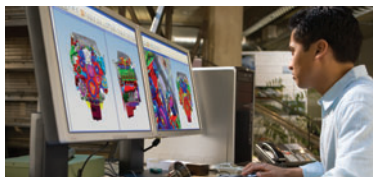
GT346AA—ATI FireGL V5600 512MB PCIe Graphics



To learn more, visit www.hp.com/go/ATI

For more information, contact your local HP reseller, visit www.hp.com/accessories/workstations, or call 1-800-888-9909.

Graphics: NVIDIA® Quadro® FX



NVIDIA Quadro
FX 370



NVIDIA Quadro
FX 1700



NVIDIA Quadro
FX 3700



NVIDIA Quadro
FX 5600

The NVIDIA® Quadro® family of professional solutions takes the leading professional applications to a new level of interactivity by enabling unprecedented capabilities. The industry's leading workstation applications leverage these solutions to enable hardware-accelerated features not found in any other professional graphics solution.

The performance and power of the NVIDIA Quadro architecture are built on a solid foundation of quality engineering. This engineering excellence is exemplified by the NVIDIA Unified Driver Architecture (UDA), which is certified for quality by the entire spectrum of CAD, DCC and visualization applications.

The Quadro product line delivers the enhanced productivity you need at every price point, from the Quadro FX 5600 at the ultra-high-end; Quadro FX 4600 and 3700 at the high-end; Quadro FX 1700 at the mid-range, to Quadro FX 570 and 370 at the entry-level.

Key features

NVIDIA unified architecture

Industry's first unified architecture designed to dynamically allocate geometry, shading, pixel, and compute processing power to deliver enhanced GPU performance.

C programming environment for the GPU

The NVIDIA® CUDA™ GPU computing software provides a C-language environment and tool suite that unleashes new capabilities to solve



complex, visualization challenges such as real-time ray tracing and interactive volume rendering.

Next-generation vertex and pixel programmability shader model 4.0

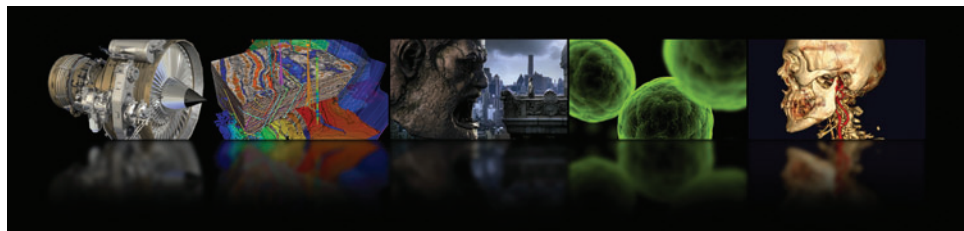
Reference standard for shader model 4.0 enabling a higher level of performance and ultra-realistic effects for next-generation OpenGL and DirectX 10 industry-leading professional applications.

Best-of-class industry solution

Flexible platform to deliver professionals best-of-class industry solutions paired with NVIDIA Quadro G-Sync II, SDI, or NVIDIA® SLI™ technology.

Availability

NVIDIA Quadro FX family of professional graphics solutions are available in all HP desktop workstations including: HP xw4550, xw4600, xw6600, xw8600, xw9400. NVIDIA Quadro FX and NVS Mobile products are also available in HP Compaq mobile workstations including: HP Compaq 8510w, 8710w, 8710p.



Images courtesy of Right Hemisphere, Landmark, a brand of the Halliburton Drilling, Evaluation and Digital Solutions, UVPFACTORY, and Vital Images.

To learn more about NVIDIA Professional Graphics Solutions, visit www.nvidia.com/page/workstation.html

For more information, contact your local HP reseller, visit www.hp.com/accessories/workstations, or call 1-800-888-9909.

Input devices/audio/ miscellaneous



HP offers the following branded aftermarket options designed to outfit our workstations to meet the needs of our customers' work demand. Choosing HP-branded options enables compatibility and support of our workstation systems.

Input devices: PS2 and USB keyboard and mice (two- or three-button). The laser mouse

offers higher resolution tracking for improved operations on difficult surfaces

Audio: Today's integrated audio is quite capable; our Sound Blaster X-Fi XtremeGamer PCI Audio Card adds HW audio mixing (32/64-bit Windows XP and Vista supported)

Miscellaneous: Rack Kits, FireWire® Cards, Security and Floppy Drives

				HP Workstation xw4550	HP Workstation xw4600	HP Workstation xw6600	HP Workstation xw8600	HP Workstation xw9400
Description	Part number	Smart Buy P/N						
HP PS/2 2-Button Scroll Mouse	DD440B			•	•	•	•	•
HP USB 2-Button Laser Mouse	GW405AA	GW405UT	•	•	•	•	•	•
HP USB 2-Button Optical Mouse	DC172B		•	•	•	•	•	•
HP USB Optical 3-Button 2.9M OEM Mouse	ET424AA			•	•	•	•	•
HP USB Optical 3-Button Mouse	DY651A		•	•	•	•	•	•
HP PS/2 Standard Keyboard	DT527A			•	•	•	•	•
HP USB Standard Keyboard	DT528A		•	•	•	•	•	•
HP USB Smart Card Keyboard	ED707AA		•	•	•	•	•	•
HP Optical Bay HDD Mounting Bracket	DY659A		•	•	•			
HP xw4 Depth Adj Fixed Rail Rack Kit	EK729AA		•	•				
HP xw6 Depth Adj Sliding Rail Rack Kit	DY663A				•			
HP xw8/9 Sliding Rail Rack Kit	DY664A					•	•	
HP xw9 Depth Adj Fixed Rail Rack Kit	AA640A							•
HP Workstation to LTO SAS Int. Cable	EH925A		•	•	•	•	•	•
HP eSATA PCI Cable Kit	GM110AA				•	•		
HP Power Cord Kit	DM293A		•	•	•	•		
HP (CMT) Solenoid Lock	DE618A		•	•	•			
hp Business PC Security Lock Kit	PV606AA		•	•	•			•
Security cable with Kensington lock	PC766A		•	•	•	•		
HP FireWire/IEEE 1394 PCI Card	PA997A		•	•				
HP FireWire 800 IEEE 1394b PCI Card	EA327AA			•	•	•	•	
HP 1.44MB Floppy Disk Drive	DY670A		•	•	•	•	•	
HP USB Powered Speakers	RD628AA			•	•	•	•	
SoundBlaster X-Fi XtremeGamer Audio Card	GE257AA		•	•	•	•	•	
HP 2nd Serial Port Adapter	PA716A		•	•	•			
HP Fan and Front Card Guide Kit	DY648A		•	•	•			
HP Internal USB Port Kit	EM165AA		•	•	•	•	•	
HP xw8 PCI Front Fan Kit	EM163AA						•	
HP xw8/9 PCI Hold Down Kit, Bulk 10 Pack	EN764AA							•
HP xw8/94 SAS Back Panel Connector Kit	EM164AA						•	•
Broadcom NetXtreme Gigabit PCIe NIC	EA833AA		•	•	•	•	•	
HP NC360T PCIe Dual Port Gigabit NIC	KU004AA				•	•		
Intel Pro 1000 PT PCIe Gigabit NIC Card	EH352AA			•	•	•		
Agere 2006 PCI High-Speed 56K International SoftModem	EK694AA		•	•				
Modem RJ11 telecoms adapter kit	DC131C		•	•				
HP 16-In-1 Media Card Reader with PCI Card	EM718AA		•	•	•	•	•	
HP Serial/Parallel PCI Card	KD062AA		•	•	•	•		

For more information, contact your local HP reseller,
visit www.hp.com/accessories/workstations, or call 1-800-888-9909.

HP SpacePilot and SpaceExplorer



Crafted from the ground up to be a virtual extension of the user, a 3D mouse by HP allows you to experience unparalleled control and mastery over your 3D work. Its breakthrough functionality features efficient navigation, advanced comfort and smart technology speed keys for effortless control. Building on the two-handed power concept with the SpaceBall, the SpacePilot and SpaceExplorer remove even more barriers between you and your work.

SpacePilot

The intelligent solution: It uses onboard intelligence to recognize the current application and modifies controls on the fly for seamless interaction with 3D models. A built-in LCD provides at-a-glance feedback to accelerate workflow.

SpaceExplorer

High-end performance at a mid-range price: Molded to the human hand, it puts all controls at the user's fingertips for enhanced comfort.

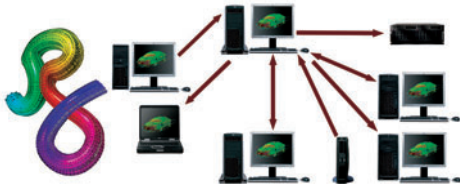


Description	Part number	Smart Buy P/N	HP Workstation xw4550	HP Workstation xw4600	HP Workstation xw6600	HP Workstation xw8600	HP Workstation xw9400
HP SpaceExplorer USB 3D Input Device	RY429AA	RY429UT	•	•	•	•	•
HP SpacePilot USB 3D Input Device	EF390AA	EF390UT	•	•	•	•	•

HP remote graphics

HP Remote Graphics Software is an advanced utility that allows you to remotely access and share your 3D graphics workstation desktop. This can be done across different platforms, providing you with a “just like local” experi-

- ence. With HP Remote Graphics Software you can:
- Remotely access 3D graphics workstations.
 - Access applications on different platforms.
 - Perform multi-user remote collaborations.



Description	Part number	Smart Buy P/N	HP Workstation xw4550	HP Workstation xw4600	HP Workstation xw6600	HP Workstation xw8600	HP Workstation xw9400
HP RGS V5 Workstation Edition	GN035AA		•	•	•	•	•
HP RGS Workstation 3-year Software Assurance	GN036AA		•	•	•	•	•

HP Performance series LCD monitors

HP Performance series LCD monitors include a range of large-screen, high-performance, advanced technology for the analyst, designer, and engineer. Features found in the Performance series LCD monitor includes:

- **Most impressive front-of-screen performance:** HP Performance monitors incorporate the highest-performing, most-advanced LCD monitor panels to provide the sharpest and most brilliant images of text and graphics with a maximum native resolution of up to 2560 x 1600 pixels. High contrast ratios generate sharper images and wide viewing angles allowing you to view the screen from various positions without compromising image quality.
- **Easy tiling:** These monitors feature a detachable base and super-thin bezel edges (<12 mm on the LP1965) that allow you to tile multiple units and easily create a panoramic view for advanced applications. The integrated power supply reduces bulky "power bricks," improves cable management to help decrease clutter, and enables mounting of the monitor flush against the wall.
- **Adjustable positioning:** The detachable base and slim, lightweight profile simplify mounting, handling, and shipping. Height-adjustment and easy tilt and swivel features let you easily find your personal comfort zone. 90-degree pivot rotation (select models) allows positioning of the monitor for portrait and landscape viewing. The HP LCD Monitor Quick Release mounting

solution comes standard as part of the stand of each Performance series monitor. The built-in Quick Release enables a variety of mounting scenarios, including bundling with another VESA-compliant device (compatibility varies by monitor). Please see the "Special features" section of this document for more information.

- **Enhanced connectivity:** A variety of inputs offer enhanced flexibility, including dual DVH, which allows the monitor to be used in either dual-analog mode or dual-digital mode and provides compatibility with the latest digital graphics cards. The built-in USB hub enables easy connectivity right on the desktop to peripherals such as the HP LCD Speaker Bar.
- **Smart software.** HP Display Assistant (bundled standard on all Performance series models except the LP3065) is a software utility that allows monitor adjustment, color calibration, and security/asset management using the Display Data Channel Command Interface (DDC/CI) protocol of the connected PC instead of the monitor's on-screen display (OSD).

Why Buy HP monitors:

- 19-, 20-, 24- and 30-inch diagonal high-performance models available
- Expert-level features
- 3-3-3 limited warranty includes backlight
- Facilitated compatibility with HP products



To learn more and order, visit www.hp.com/go/wsmonitors

For more information, contact your local HP reseller, visit www.hp.com/accessories/workstations, or call 1-800-888-9909.

HP DreamColor LP2480zx Professional LCD Display



Are you ready to replace your outdated CRTs and mainstream LCDs with a color-critical LCD that exceeds cathode-ray tube (CRT) performance standards? Developed in close collaboration with DreamWorks Animation, the HP DreamColor LP2480zx Professional LCD Display is the world's only color-critical LCD based on HP DreamColor Engine technology.

This uniquely affordable monitor delivers broad color support, rich visual quality, and consistent presentation results on a 24-inch diagonal wide-aspect screen. Now, you can create real-world color that is truly accurate, radically predictable, and set-it-and-forget-it simple.

Billion-color possibilities

- Innovative 30-bit LCD panel technology supports over one billion active colors—64 times the colors supported by traditional LCDs for virtual reduction of banding or contouring artifacts
- Super IPS panel technology
- Best-in-class off-axis performance including ultra low chrominance shift and contrast degradation
- Tearing-free film and 50/60 Hz video playback

Breakthrough color control

- Work with deeper colors, CRT-class black, and programmable white.
- Set the white point precisely with the RGB LED backlight.
- Share projects and match the toughest colors.
- Improve content collaboration across the hall or the world with exact-color certainty.



Vision-to-production precision

- Choose factory-calibrated color spaces with the touch of a button: sRGB, Adobe RGB, Rec. 601, Rec. 709, DCI-P3 emulation (97%), and full gamut.
- Use the optional HP DreamColor Advanced Profiling Solution to customize color space by defining the primaries, gamma, white point, and luminance (includes colorimeter and software).
- HP Night Vision user interface with on-screen button tags and auto-fade backlight bezel buttons for easy control in bright and dark work environments.

Performance-class features

HP Performance series monitor features include:

- DisplayPort 1.1, HDMI 1.3, (2) DVI-I, analog, component, S-video, and composite inputs, and high-bandwidth digital-content protection (HDCP) support for protected content
- Customizable tilt, swivel, height adjustment, and pivot rotation so you can work comfortably
- Built-in four-port USB hub

Availability

HP DreamColor LP2480zx professional LCD display is available with all HP Workstations.

GV546A4#ABA

GV546A8#ABA **Smart Buy**



HP DreamColor

To learn more and order, visit www.hp.com/go/dreamcolor

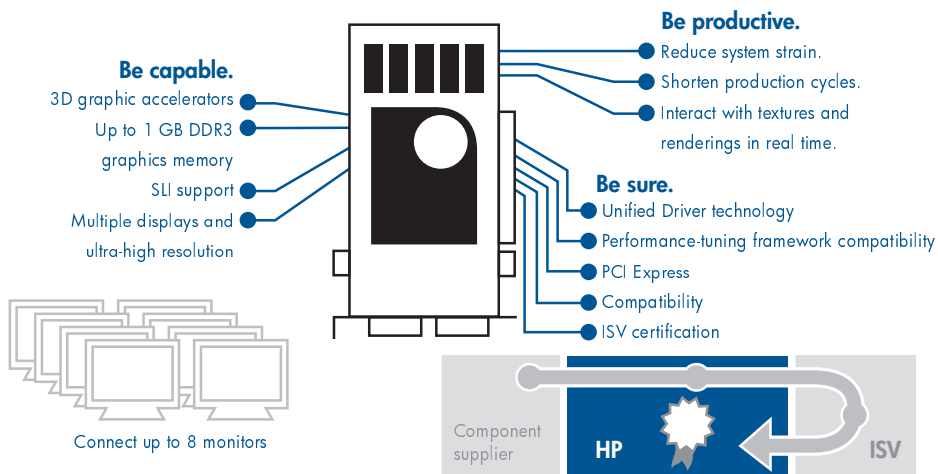
For more information, contact your local HP reseller, visit www.hp.com/accessories/workstations, or call 1-800-888-9909.

Why buy HP options?

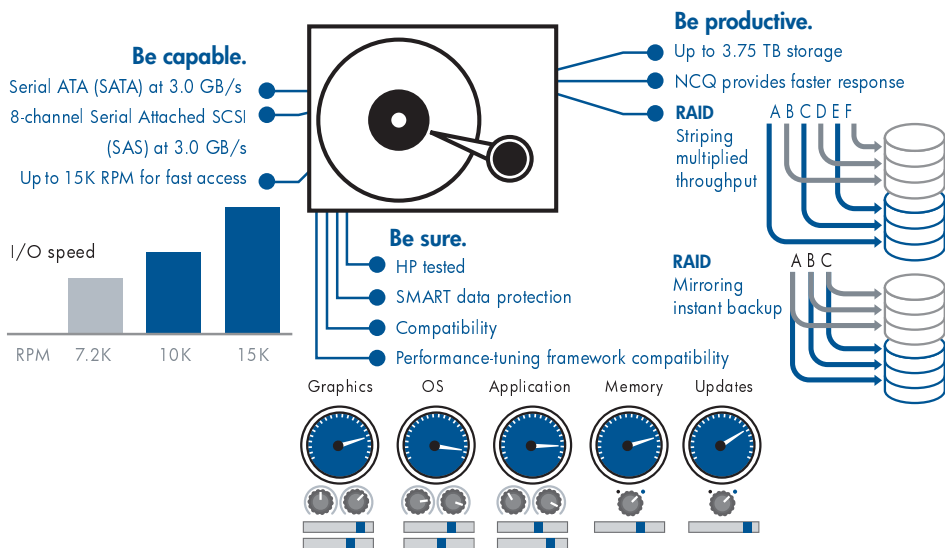
Graphics and hard drives



When you need vision,
step up your graphics card.



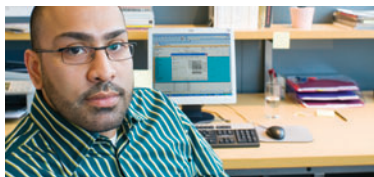
When you need capacity,
choose a capable hard drive.



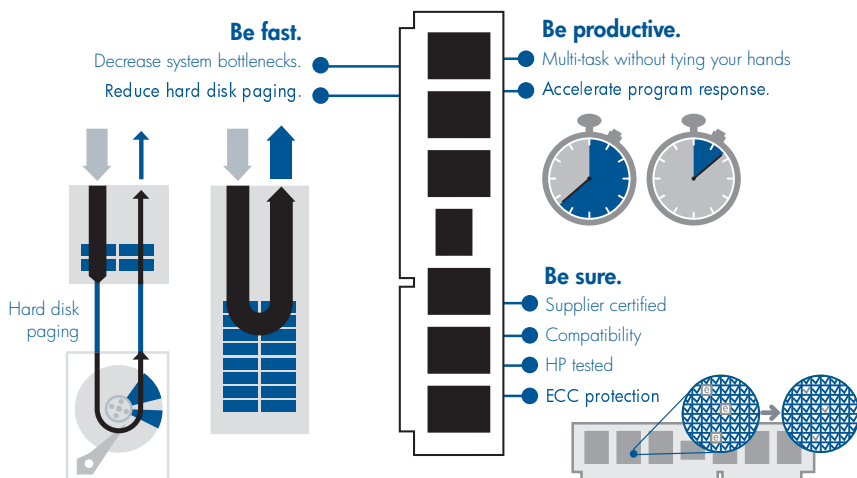
For more information, contact your local HP reseller,
visit www.hp.com/accessories/workstations, or call 1-800-888-9909.

Why buy HP options?

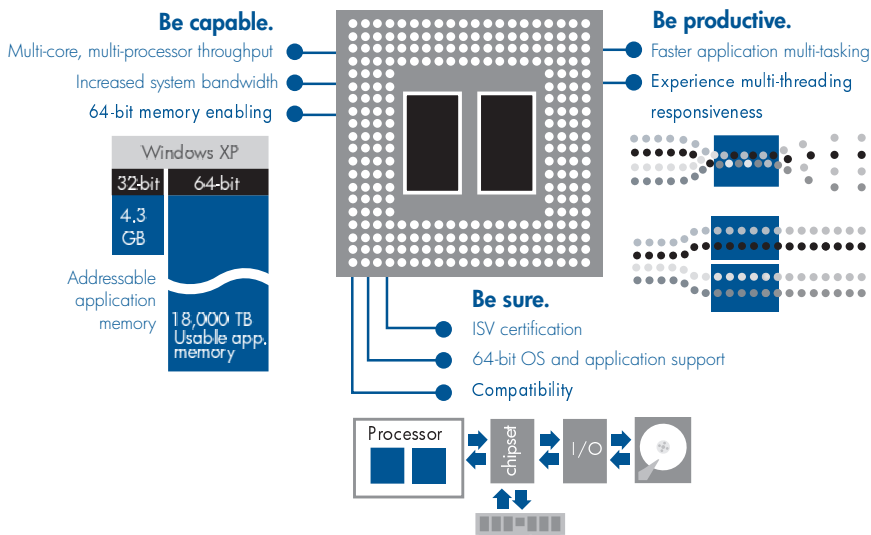
Memory and second processors



**When you need speed,
choose qualified memory.**



**When you need power,
choose a potent processor.**



For more information, contact your local HP reseller,
visit www.hp.com/accessories/workstations, or call 1-800-888-9909.

1. This system requires a separately purchased 64-bit operating system and 64-bit software products to take advantage of the 64-bit processing capabilities of the AMD Opteron 64 processor. Given the wide range of software applications available, performance of a system including a 64-bit operating system will vary. The theoretical memory limit for 64-bit systems is about 18 exabytes (18 billion gigabytes). Windows XP x64 is limited currently to 128 GB of physical memory and 16 GB of virtual memory.
2. AMD's model numbering is not a measurement of higher performance.
3. Intel EM64T requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-enabled BIOS. Performance will vary depending on your hardware and software configurations. See www.intel.com/info/em64t for more information including details on which processors support Intel EM64T or consult with your system vendor for more information.
4. Intel's numbering is not a measurement of higher performance.
5. 1 GB = 1 billion bytes. Actual formatted capacity is less. Up to 8 GB of hard drive (or system disk) is reserved for the system recovery software. For Vista, up to 12 GB of system disk is reserved for system recovery software.
6. 16X maximum DVD+/-RW drive data transfer rates up to 6000 KB/sec (CD) and 22,000 KB/sec (DVD)
7. 48X maximum CD-ROM drive transfers data at a rate up to 7200 KB/sec
8. 48X maximum DVD/CD-RW combo drive data transfer rates vary up to 7,200 KB/sec
9. Note that DVD-RAM cannot read or write to 2.6 GB single-sided/5.2 GB double sided, version 1.0 media.
10. LightScribe creates a grayscale image similar to a black-and-white photograph. LightScribe media required and sold separately. Does not permit copying of commercially available DVD movies or other copyright-protected materials. Intended for your original content and other lawful uses.
11. Maximum memory capacities assume 64-bit operating systems. Microsoft Windows XP (32-bit) supports 4 GB (with Microsoft 32-bit, the amount of usable memory will be dependent upon your system configuration. It may be less than 4 GB); 32-bit Linux can support up to 8 GB.
12. Up to 1 GB may not be available with 32-bit operating systems due to system resource requirements.
13. For hard drives, 1 TB = 1 trillion bytes. Actual formatted capacity is less. Up to 8 GB (for XP and XP Pro) and up to 12 GB (for Vista) of system disk is reserved for system recovery software.
14. This system requires a separately purchased 64-bit operating system and 64-bit software products to take advantage of the 64-bit processing capabilities of Intel technology. Quad-core processing available with Intel technology is designed to improve performance of this system. Given the wide range of software applications available, performance of a system including a 64-bit operating system and a quad-core processor will vary.

To learn more about HP workstation accessories,
visit www.hp.com/accessories/workstations

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